

known in the art, e.g., a sleeve with fluted ends and a more narrow central section such that the tubes coact with the narrowed center portion of the sleeve to create the compressive force. IN addition, the sleeve itself could be the internal tubular structure, e.g., having a protrusion that slides along a slot in one or the other of the two tubes running the length of a collapsible member, e.g., 32a, so as to be able to be moved from a position in which the sleeve (now an internally disposed sleeve) slideably internally engages both of the other tubes to one in which it so engages only one of the other tubes, similarly to the configuration as shown in Fig. 5. Other such modifications may be made to the mechanical structural elements of the present invention, e.g., the dowels could be replaced with solid or hollow metal rods, or even generally flat struts, particularly if a hinged construction of the struts is desired, all of which may be made, e.g., of metal, e.g., made of aluminum, and/or the eyelets could be replaced with holes bored through the rigid structural members, whether such are wooden or metal, hollow or tubular or flat in construction. the present invention, therefore, should not be limited to any preferred embodiments disclosed in this application and should be considered described and claimed only through the following claims:

We claim:

1. A collapsible support structure, comprising:
  - a plurality of interconnected frame sections each comprising:
    - a first elongated rigid member having a first end and a second end;
    - a second elongated rigid member having a first end and a second end;
  - wherein the first end of the first elongated rigid member and the second elongated rigid member are hingedly joined;
  - a collapsible elongated member comprising:
    - an elongated flexible tensioning member connected between the second end of the first elongated rigid member and the second end of the second elongated rigid member;
    - a first hollow tubular rigidizing member extending along a

- portion of the length of the elongated flexible tensioning member;
- a second hollow tubular rigidizing member extending along essentially the remainder of the length of the elongated flexible tensioning member; and
- a rigidizing sleeve member slideably mounted on the first or the second hollow tubular member and sized to slideably engage the other of the first and second hollow tubular when the first and second hollow tubular rigidizing members are essentially axially aligned and the rigidizing sleeve member is positioned to slideably engage each of the hollow tubular rigidizing members to form a collapsible elongated tubular member extending essentially between the second ends of each of the first and second elongated rigid members and having the elongated flexible tensioning member axially disposed therein.
2. The apparatus of claim 1 wherein the interconnected frame sections each form a triangle.
  3. The apparatus of claim 1 wherein the interconnected frame sections each form a portion of a geodesic structure.
  4. The apparatus of claim 1 wherein the interconnected frame sections form a portion of a truncated icosahedron.
  5. The apparatus of claim 4 wherein the interconnected frame sections form a portion of an upstanding portion of an icosahedron structure extending between a first and a second lesser circle polygonal shape, with the hingedly joined first ends of the first and second elongated rigid members being joined at a corner of the first lesser circle polygonal shape and the collapsible elongated tubular member forming a side of the second lesser circle polygonal shape.
  6. A collapsible support structure, comprising:
    - a plurality of interconnected frame sections each comprising:
      - a first elongated one-piece rigid member having a first end and a

second end;

a second elongated one-piece rigid member having a first end and a second end;

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wherein the first end of the first elongated one-piece rigid member and the second elongated one-piece rigid member are hingedly joined;

a collapsible elongated member comprising:

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an elongated flexible tensioning member connected between the second end of the first elongated rigid member and the second end of the second elongated rigid member;

a first hollow tubular rigidizing member extending along a portion of the length of the elongated flexible tensioning member;

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a second hollow tubular rigidizing member extending along essentially the remainder of the length of the elongated flexible tensioning member; and

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a rigidizing sleeve member slideably mounted on the first or the second hollow tubular member and sized to slideably engage the other of the first and second hollow tubular when the first and second hollow tubular rigidizing members are essentially axially aligned and the rigidizing sleeve member is positioned to slideably engage each of the hollow tubular rigidizing members to form a collapsible elongated tubular member extending essentially between the second ends of each of the first and second elongated one-piece rigid members and having the elongated flexible tensioning member axially disposed therein.

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7. The apparatus of claim 6 wherein the interconnected frame sections each form a triangle.

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8. The apparatus of claim 6 wherein the interconnected frame sections each form a portion of a geodesic structure.

9. The apparatus of claim 6 wherein the interconnected frame sections form a portion of a truncated icosahedron.

10. The apparatus of claim 9 wherein the interconnected frame sections form a portion of an upstanding portion of an icosahedron structure extending between a first and a second lesser circle polygonal shape, with the hingedly joined first ends of the first and second elongated rigid members being joined at a corner of the first lesser circle polygonal shape and the collapsible elongated tubular member forming a side of the second lesser circle polygonal shape.

11. A collapsible support structure, comprising:

- 10 a plurality of interconnected frame sections each comprising:
- a first elongated rigid member having a first end and a second end;
  - a second elongated rigid member having a first end and a second end;
  - a third elongated rigid member having a first end and a second end;
- 15 wherein the first ends of the respective first elongated rigid member and the second elongated rigid member are hingedly joined, and the second ends of the respective second elongated rigid member and the third elongated rigid member are hingedly attached;
- a first and a second collapsible elongated member, each comprising:
- 20 an elongated flexible tensioning member connected respectively between the second end of the of the first elongated rigid member and the second end of the second elongated rigid member and between the hinged connection of the first ends of the respective first and second elongated rigid members and the first end of the third elongated rigid member;
- 25 a first hollow tubular rigidizing member extending along a portion of the length of the respective elongated flexible tensioning member;
- 30 a second hollow tubular rigidizing member extending along essentially the remainder of the length of the respective

- 5 elongated flexible tensioning member; and  
a rigidizing sleeve member slideably mounted on the first or  
the second hollow tubular member and sized to slideably  
engage the other of the first and second hollow tubular  
rigidizing members when the first and second hollow tubular  
rigidizing members are essentially axially aligned and the  
rigidizing sleeve member is positioned to slideably engage  
each of the hollow tubular rigidizing members to form a  
collapsible elongated tubular member extending essentially  
10 between respectively the second ends of each of the first and  
second elongated rigid members and the hinged connection  
of the first ends of the first and second elongated rigid  
members and the first end of the third elongated rigid  
member, the having the respective elongated flexible  
15 tensioning member axially disposed therein.
12. The apparatus of claim 11 wherein the interconnected frame sections each form  
a parallelogram comprising two interconnected triangles sharing the second rigid  
elongated member as one side of the respective triangles.
13. The apparatus of claim 11 wherein the interconnected frame sections each form  
20 a portion of a geodesic structure.
14. The apparatus of claim 11 wherein the interconnected frame sections form a  
portion of a truncated icosahedron.
15. The apparatus of claim 14 wherein the interconnected frame sections form a  
portion of an upstanding portion of a icosahedron structure extending between a  
25 first and a second lesser circle polygonal shape, with the hingedly joined first ends  
of the first and second elongated rigid members being joined at a corner of the first  
lesser circle polygonal shape and the second collapsible elongated tubular member  
forming an adjacent side of the first lesser circle polygonal shape, and with the  
hinged connection of the second ends of the second and third elongated rigid  
30 members forming a corner of the second lesser circle polygonal shape and the  
second collapsible elongated tubular member forming an adjacent side of the

second lesser circle polygonal shape.

16. A collapsible support structure, comprising:

a plurality of interconnected frame sections each comprising:

5 a first one-piece elongated rigid member having a first end and a second end;

a second one-piece elongated rigid member having a first end and a second end;

a third one piece elongated rigid member having a first end and a second end;

10 wherein the first ends of the respective first one-piece elongated rigid member and the second one-piece elongated rigid member are hingedly joined, and the second ends of the respective second one-piece elongated rigid member and the third one-piece elongated rigid member are hingedly attached;

15 a first and a second collapsible elongated member, each comprising:

a first and a second elongated flexible tensioning member connected respectively between the second end of the of the first one-piece elongated rigid member and the second end of the second one-piece elongated rigid member and between the hinged connection of the first ends of the  
20 respective first and second one-piece elongated rigid members and the first end of the third one-piece elongated rigid member;

25 a first hollow tubular rigidizing member extending along a portion of the length of the respective elongated flexible tensioning member;

a second hollow tubular rigidizing member extending along essentially the remainder of the length of the respective elongated flexible tensioning member; and

30 a rigidizing sleeve member slideably mounted on the first or the second hollow tubular member and sized to slideably

engage the other of the first and second hollow tubular rigidizing members when the first and second hollow tubular rigidizing members are essentially axially aligned and the rigidizing sleeve member is positioned to slideably engage each of the hollow tubular rigidizing members to form a collapsible elongated tubular member extending essentially between respectively the second ends of each of the first and second one-piece elongated rigid members and the hinged connection of the first ends of the first and second one-piece elongated rigid members and the first end of the third one-piece elongated rigid member, the having the respective elongated flexible tensioning member axially disposed therein.

17. The apparatus of claim 16 wherein the interconnected frame sections each form a parallelogram comprising two interconnected triangles sharing the second one-piece elongated rigid member as one side of the respective triangles.

18. The apparatus of claim 16 wherein the interconnected frame sections each form a portion of a geodesic structure.

19. The apparatus of claim 16 wherein the interconnected frame sections form a portion of a truncated icosahedron.

20. The apparatus of claim 19 wherein the interconnected frame sections form a portion of an upstanding portion of an icosahedron structure extending between a first and a second lesser circle polygonal shape, with the hingedly joined first ends of the first and second one-piece elongated rigid members being joined at a corner of the first lesser circle polygonal shape and the second collapsible elongated tubular member forming an adjacent side of the first lesser circle polygonal shape, and with the hinged connection of the second ends of the second and third one-piece elongated rigid members forming a corner of the second lesser circle polygonal shape and the second collapsible elongated tubular member forming an adjacent side of the second lesser circle polygonal shape.

21. The apparatus of claim 1, wherein the hinged connection of the first ends of the

first and second elongated rigid members is provided by another flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second elongated rigid members.

5 22. The apparatus of claim 6, wherein the hinged connection of the first ends of the first and second one-piece elongated rigid members is provided by another flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second one-piece elongated rigid members.

10 23. The apparatus of claim 11, wherein the hinged connection of the first ends of the first and second elongated rigid members is provided by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second elongated rigid members, and the hinged connection of the second ends of the second and  
15 third elongated rigid members is provided by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the second ends of each of the second and third elongated rigid members.

20 24. The apparatus of claim 16, wherein the hinged connection of the first ends of the first and second one-piece elongated rigid members is provided by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second one-piece elongated rigid members, and the hinged connection of the second ends of the second and third one-piece elongated rigid members is provided  
25 by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the second ends of each of the second and third one-piece elongated rigid members.

25. The apparatus of claim 21 wherein the flexible elongated tensioning member receiving passage is formed by an eyelet attached to the respective end of each of  
30 the first and second elongated rigid members.

26. The apparatus of claim 22 wherein the flexible elongated tensioning member



receiving passage is formed by an eyelet attached to the respective end of each of the first and second one-piece elongated rigid members.

27. The apparatus of claim 23 wherein the flexible elongated tensioning member receiving passage is formed by an eyelet attached to the respective end of each of  
5 the first second and third elongated rigid members.

28. The apparatus of claim 24 wherein the flexible elongated tensioning member receiving passage is formed by an eyelet attached to the respective end of each of the first second and third one-piece elongated rigid members.

29. A collapsible support structure, comprising:  
10 a plurality of interconnected frame sections each comprising:  
a first elongated rigid member having a first end and a second end;  
a second elongated rigid member having a first end and a second end;  
end;  
wherein the first end of the first elongated rigid member and the  
15 second elongated rigid member are hingedly joined;  
a collapsible elongated member comprising:  
an elongated flexible tensioning member, connected between  
the second end of the of the first elongated rigid member and  
the second end of the second elongated rigid member;  
20 a first hollow tubular rigidizing member extending along a  
portion of the length of the elongated flexible tensioning  
member;  
a second hollow tubular rigidizing member extending along  
essentially the remainder of the length of the elongated  
25 flexible tensioning member; and  
a rigidizing means for selectively providing rigidity in  
combination with the elongated flexible tensioning member  
by forming a rigid hollow tubular rigidizing sleeve from at  
least two separate hollow tubular members to allow tension  
30 to be applied between the respective ends second ends of the  
first and second elongated rigid members while maintaining

a fixed separation between the respective second ends of the first and second elongated rigid members.

30. The apparatus of claim 29 wherein the interconnected frame sections each form a triangle.

5 31. The apparatus of claim 29 wherein the interconnected frame sections each form a portion of a geodesic structure.

32. The apparatus of claim 29 wherein the interconnected frame sections form a portion of a truncated icosahedron.

33. The apparatus of claim 32 wherein the interconnected frame sections form a  
10 portion of an upstanding portion of an icosahedron structure extending between a first and a second lesser circle polygonal shape, with the hingedly joined first ends of the first and second elongated rigid members being joined at a corner of the first lesser circle polygonal shape and the rigidizing means forming a side of the second lesser circle polygonal shape.

15 34. A collapsible support structure, comprising:

a plurality of interconnected frame sections each comprising:

a first elongated one-piece rigid member having a first end and a second end;

20 a second elongated one-piece rigid member having a first end and a second end;

wherein the first end of the first elongated one-piece rigid member and the second elongated one-piece rigid member are hingedly joined;

a collapsible elongated member comprising:

25 an elongated flexible tensioning member, connected between the second end of the of the first elongated one-piece rigid member and the second end of the second one-piece elongated rigid member;

30 a first hollow tubular rigidizing member extending along a portion of the length of the elongated flexible tensioning member;

a second hollow tubular rigidizing member extending along  
essentially the remainder of the length of the elongated  
flexible tensioning member; and  
a rigidizing means for selectively providing rigidity in  
5 combination with the elongated flexible tensioning member  
by forming a rigid hollow tubular rigidizing sleeve from at  
least two separate hollow tubular members to allow tension  
to be applied between the respective ends second ends of the  
first and second one piece elongated rigid members while  
10 maintaining a fixed separation between the respective  
second ends of the first and second one-piece elongated rigid  
members.

35. The apparatus of claim 34 wherein the interconnected frame sections each form  
a triangle.

15 36. The apparatus of claim 34 wherein the interconnected frame sections each form  
a portion of a geodesic structure.

37. The apparatus of claim 34 wherein the interconnected frame sections form a  
portion of a truncated icosahedron.

38. The apparatus of claim 37 wherein the interconnected frame sections for a  
20 portion of an upstanding portion of an icosahedron structure extending between a  
first and a second lesser circle polygonal shape, with the hingedly joined first ends  
of the first and second one-piece elongated rigid members being joined at a corner  
of the first lesser circle polygonal shape and the rigidizing means forming a side of  
the second lesser circle polygonal shape.

25 39. A collapsible support structure, comprising:

a plurality of interconnected frame sections each comprising:

a first elongated rigid member having a first end and a second end;  
a second elongated rigid member having a first end and a second  
end;

30 a third elongated rigid member having a first end and a second end;  
wherein the first ends of the respective first elongated rigid member

and the second elongated rigid member are hingedly joined, and the second ends of the respective second elongated rigid member and the third elongated rigid member are hingedly attached;

a first and a second collapsible elongated member, each comprising:

- 5                   an elongated flexible tensioning member connected  
                  respectively between the second end of the of the first  
                  elongated rigid member and the second end of the second  
                  elongated rigid member and between the hinged connection  
10                  of the first ends of the respective first and second elongated  
                  rigid members and the first end of the third elongated rigid  
                  member;  
                  a first and a second rigidizing means for selectively  
                  providing rigidity in combination with the respective first  
                  and second elongated flexible tensioning members by  
15                  forming a rigid hollow tubular rigidizing sleeve from at least  
                  two separate hollow tubular members to allow tension to be  
                  applied between the respective second ends of the first and  
                  second elongated rigid members while maintaining a fixed  
                  separation between the respective second ends of the first  
20                  and second elongated rigid members respecting the first  
                  rigidizing means, and to allow tension to be applied between  
                  the respective first ends of the second and third elongated  
                  rigid members while maintaining a fixed separation between  
                  the respective first ends of the second and third elongated  
25                  rigid members respecting the second rigidizing means.

40. The apparatus of claim 39 wherein the interconnected frame sections each form a parallelogram comprising two interconnected triangles sharing the second rigid elongated member as one side of the respective triangles.

41. The apparatus of claim 39 wherein the interconnected frame sections each form  
30 a portion of a geodesic structure.

42. The apparatus of claim 39 wherein the interconnected frame sections form a

portion of a truncated icosahedron.

43. The apparatus of claim 42 wherein the interconnected frame sections form a portion of an upstanding portion of an icosahedron structure extending between a first and a second lesser circle polygonal shape, with the hingedly joined first ends  
5 of the first and second elongated rigid members being joined at a corner of the first lesser circle polygonal shape and the second rigidizing means forming an adjacent side of the first lesser circle polygonal shape, and with the hinged connection of the second ends of the second and third elongated rigid members forming a corner of the second lesser circle polygonal shape and the second rigidizing means forming  
10 an adjacent side of the second lesser circle polygonal shape.

44. A collapsible support structure, comprising:

a plurality of interconnected frame sections each comprising:

a first one-piece elongated rigid member having a first end and a second end;  
15 a second one-piece elongated rigid member having a first end and a second end;  
a third one piece elongated rigid member having a first end and a second end;

wherein the first ends of the respective first one-piece elongated rigid member and the second one-piece elongated rigid member are  
20 hingedly joined, and the second ends of the respective second one-piece elongated rigid member and the third one-piece elongated rigid member are hingedly attached;

a first and a second collapsible elongated member, each comprising:

25 an elongated flexible tensioning member connected respectively between the second end of the of the first one-piece elongated rigid member and the second end of the second one-piece elongated rigid member and between the hinged connection of the first ends of the respective first and  
30 second one-piece elongated rigid members and the first end of the third elongated rigid member;

a first and a second rigidizing means for selectively providing rigidity in combination with the respective first and second elongated flexible tensioning members by forming a rigid hollow tubular rigidizing sleeve from at least two separate hollow tubular members to allow tension to be applied between the respective second ends of the first and second one-piece elongated rigid members while maintaining a fixed separation between the respective second ends of the first and second one-piece elongated rigid members respecting the first rigidizing means, and to allow tension to be applied between the respective first ends of the second and third one-piece elongated rigid members while maintaining a fixed separation between the respective first ends of the second and third one-piece elongated rigid members respecting the second rigidizing means.

45. The apparatus of claim 44 wherein the interconnected frame sections each form a parallelogram comprising two interconnected triangles sharing the second one-piece elongated rigid member as one side of the respective triangles.

46. The apparatus of claim 44 wherein the interconnected frame sections each form a portion of a geodesic structure.

47. The apparatus of claim 44 wherein the interconnected frame sections form a portion of a truncated icosahedron.

48. The apparatus of claim 47 wherein the interconnected frame sections form a portion of an upstanding portion of an icosahedron structure extending between a first and a second lesser circle polygonal shape, with the hingedly joined first ends of the first and second one-piece elongated rigid members being joined at a corner of the first lesser circle polygonal shape and the first rigidizing means forming an adjacent side of the first lesser circle polygonal shape, and with the hinged connection of the second ends of the second and third one-piece elongated rigid members forming a corner of the second lesser circle polygonal shape and the second rigidizing means forming an adjacent side of the second lesser circle

polygonal shape.

49. The apparatus of claim 29, wherein the hinged connection of the first ends of the first and second elongated rigid members is provided by another flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second elongated rigid members.

50. The apparatus of claim 34, wherein the hinged connection of the first ends of the first and second one-piece elongated rigid members is provided by another flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second one-piece elongated rigid members.

51. The apparatus of claim 39, wherein the hinged connection of the first ends of the first and second elongated rigid members is provided by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second elongated rigid members, and the hinged connection of the second ends of the second and third elongated rigid members is provided by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the second ends of each of the second and third elongated rigid members.

52. The apparatus of claim 44, wherein the hinged connection of the first ends of the first and second one-piece elongated rigid members is provided by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the first end of each of the first and second one-piece elongated rigid members, and the hinged connection of the second ends of the second and third one-piece elongated rigid members is provided by the second flexible elongated tensioning member extending through a flexible elongated tensioning member receiving passage on the second ends of each of the second and third one-piece elongated rigid members.

53. The apparatus of claim 49 wherein the flexible elongated tensioning member receiving passage is formed by an eyelet attached to the respective end of each of

the first and second elongated rigid members.

54. The apparatus of claim 50 wherein the flexible elongated tensioning member receiving passage is formed by an eyelet attached to the respective end of each of the first and second one-piece elongated rigid members.

5 55. The apparatus of claim 51 wherein the flexible elongated tensioning member receiving passage is formed by an eyelet attached to the respective end of each of the first second and third elongated rigid members.

56. The apparatus of claim 52 wherein the flexible elongated tensioning member receiving passage is formed by an eyelet attached to the respective end of each of  
10 the first second and third one-piece elongated rigid members.

57. A method of forming a collapsible support structure, comprising:

providing a plurality of interconnected frame sections each comprising:

a first elongated rigid member having a first end and a second end;

a second elongated rigid member having a first end and a second

15 end;

wherein the first end of the first elongated rigid member and the second elongated rigid member are hingedly joined;

providing a collapsible elongated member comprising:

an elongated flexible tensioning member, connected between

20 the second end of the of the first elongated rigid member and the second end of the second elongated rigid member;

at least two hollow tubular rigidizing members extending along the length of the elongated flexible tensioning

member; and

25 rigidizing the first and second hollow rigidizing members for selectively providing rigidity in combination with the elongated flexible tensioning member by forming a rigid hollow tubular rigidizing sleeve from the at least two hollow tubular members to allow tension to be applied between the respective second ends of  
30 the first and second elongated rigid members while maintaining a fixed separation between the respective second ends of the first and



second elongated rigid members.

58. A method of forming a collapsible support structure, comprising:

providing a plurality of interconnected frame sections each comprising:

a first elongated one-piece rigid member having a first end and a  
5 second end;

a second elongated one-piece rigid member having a first end and a  
second end;

wherein the first end of the first elongated one-piece rigid member  
and the second elongated one-piece rigid member are hingedly  
10 joined;

providing a collapsible elongated member comprising:

an elongated flexible tensioning member, connected between  
the second end of the of the first one-piece elongated rigid  
member and the second end of the second one-piece  
15 elongated rigid member;

at least two hollow tubular rigidizing members extending  
along the length of the elongated flexible tensioning  
member; and

rigidizing the first and second hollow rigidizing members for  
20 selectively providing rigidity in combination with the  
elongated flexible tensioning member by forming a rigid  
hollow tubular rigidizing sleeve from the at least two hollow  
tubular members to allow tension to be applied between the  
respective second ends of the first and second elongated  
25 rigid members while maintaining a fixed separation between  
the respective second ends of the first and second elongated  
rigid members.

59. A method of providing a collapsible support structure, comprising:

providing a plurality of interconnected frame sections each comprising:

30 a first elongated rigid member having a first end and a second end;

a second elongated rigid member having a first end and a second

end;

a third elongated rigid member having a first end and a second end;  
 wherein the first ends of the respective first elongated rigid member  
 and the second elongated rigid member are hingedly joined, and the  
 5 second ends of the respective second elongated rigid member and  
 the third elongated rigid member are hingedly attached;

providing a first and a second collapsible elongated member each  
 comprising:

a first elongated flexible tensioning member, connected  
 10 between the second end of the of the first elongated rigid  
 member and the second end of the second elongated rigid  
 member and a second elongated flexible tensioning member,  
 connected between the first end of the second elongated  
 rigid member and the first end of the third elongated rigid  
 15 member;

at least two hollow tubular rigidizing members each  
 extending along the length of the respective elongated  
 flexible tensioning member; and

rigidizing the at least two rigidizing members for selectively  
 20 providing rigidity in combination with the respective elongated  
 flexible tensioning member by forming a rigid hollow tubular  
 rigidizing sleeve from the at least two hollow tubular members to  
 allow tension to be applied between the respective second ends of  
 the first and second elongated rigid members while maintaining a  
 25 fixed separation between the respective second ends of the first and  
 second elongated rigid members and between the respective first  
 ends of the second and third elongated rigid members while  
 maintaining a fixed separation between the respective first ends of  
 the second and third elongated rigid members.

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. A method of forming a collapsible support structure, comprising:

providing a plurality of interconnected frame sections each comprising:

a first one-piece elongated rigid member having a first end and a second end;

5 a second one-piece elongated rigid member having a first end and a second end;

a third one-piece elongated rigid member having a first end and a second end;

wherein the first ends of the respective first one-piece elongated rigid member and the second one-piece elongated rigid member are hingedly joined, and the second ends of the respective second one-piece elongated rigid member and the third one-piece elongated rigid member are hingedly attached;

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providing a first and a second collapsible elongated member each comprising:

15 a first elongated flexible tensioning member, connected between the second end of the of the first one-piece elongated rigid member and the second end of the second one-piece elongated rigid member and a second elongated flexible tensioning member, connected between the first end of the one-piece second elongated rigid member and the first end of the third one-piece elongated rigid member;

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at least two hollow tubular rigidizing members each extending along the length of the respective elongated flexible tensioning member; and

25 rigidizing the at least two rigidizing members for selectively providing rigidity in combination with the respective elongated flexible tensioning member by forming a rigid hollow tubular rigidizing sleeve from the at least two hollow tubular members to allow tension to be applied between the respective second ends of the first and second one-piece elongated rigid members while

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maintaining a fixed separation between the respective second ends

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of the first and second one-piece elongated rigid members and to allow tension to be applied between the respective first ends of the second and third one-piece elongated rigid members while maintaining a fixed separation between the respective first ends of the second and third one-piece elongated rigid members.